Wisconsin's Proposed Rule to Reduce Mercury Emissions

See back page for meeting and hearing dates

On June 27, 2001, Wisconsin's Natural Resources Board approved a public involvement process to gather public input on a proposed rule to reduce mercury emissions in the state. The proposed rule targets coal-burning power plants in Wisconsin, which the Department of Natural Resources believes are the major source of ambient mercury pollution in the state. The rule consists of a gradually phased reduction of 30, 50 and 90 percent of mercury emissions over 15 years. The department feels these proposed regulations are necessary because:

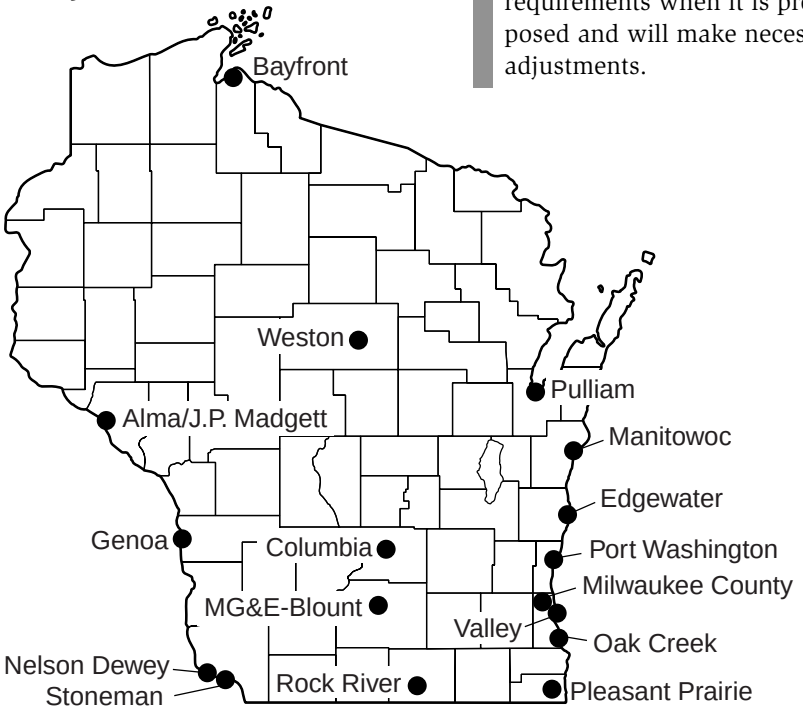
- Mercury is persistent in the environment. Any reductions achieved now and in the immediate future will have long term benefits for human and environmental health.
- Mercury is transported across state borders. Emissions from Wisconsin sources contribute to public health problems in Wisconsin and neighboring states, and vice versa. Wisconsin can help lead a broader mercury reduction initiative.
- Actions Wisconsin and a handful of other states are taking now influence and inform federal actions to our state's benefit. Wisconsin intends to work closely with the United States Environmental Protection Agency as federal rules and policy are developed to address the widespread nature of mercury contamination.

The Natural Resources Board directed DNR staff to include several proposed mercury reduction alternatives in the public involvement process for the rule. The public is invited to learn about the basic rule provisions and alternatives at the public information meetings and then formally comment on them at subsequent public hearings. Appointed advisory groups also will offer comments on the rule for the DNR Secretary and advise on possible rule revisions.

Federal Regulations

In December 2000, the USEPA made a narrow, but very significant, decision to develop regulations for emissions of mercury and other hazardous air pollutants from coal-fired and oil-fired power plants. This decision did not include regulation of other industrial sources of mercury air emissions. Under the hazardous air pollutant requirements of the Clean Air Act the regulation will eventually lead to a control technology standard, Maximum Available Control Technology (MACT), only affecting utilities and based primarily on current control technology and practices. The DNR will evaluate the impact of this federal action on state requirements when it is proposed and will make necessary adjustments.

Fossil Fuel-fired Electric Utility Plants in Wisconsin



Source: Wisconsin Department of Natural Resources, Bureau of Air Management

WISCONSIN DEPT. OF NATURAL RESOURCES

PUB-AM-316 2001

Basic Rule Provisions

The goal of the proposed rule is to reduce mercury air emissions in Wisconsin by setting mercury emission ceilings for large sources; require major utilities to reduce emissions in phases of 30, 50, and 90 percent over 15 years; and require new sources to offset increases in mercury emissions.

Provisions to Achieve Goal:

Mercury Emission Ceilings

Within two years of promulgation, owners or operators of major utilities and large stationary sources must provide information on their baseline mercury emissions to the DNR. Baseline emissions are the average annual mercury emissions during a three-year period (1998-2000). The rule will contain acceptable procedures for determining annual emissions. The DNR can establish an alternative baseline if information is provided that demonstrates that average emissions over that three-year period are not representative. DNR has one year after submittal to review baseline emission submittals and set annual mercury emission ceilings for major utilities and large stationary sources.

Certified Emission Reduction Credits

The proposed rule allows for the creation of Certified Emission Reduction Credits. These credits would be available to achieve compliance with the emissions ceiling, emission offsets and phased reduction requirements in the proposed rule. Certified Emission Reduction Credits can be created through the following voluntary activities:

Pollution Reduction Project –

A specific action, such as installing or modifying a pollutant control system, making a process change, or reformulating a product, that results in a real reduction in mercury air emissions.

A Mercury-containing Product Reduction Project –

The collection of mercury containing products, such as thermometers, in a manner that would prevent mercury emissions from occurring during transport, storage and disposal. Provisions have been set that will establish the expected mercury reduction level from these projects so that there is certainty in the amount of certified credits that are available.

Up to 50 percent of a major utility's emission reduction requirement can be achieved through the use of Certified Emission Reduction Credits. Certified Emission Reduction Credits are marketable and can be held, exchanged or sold to meet emission ceiling, emission offset and phased emission reduction requirements in the proposed rules. Three years after promulgation, the proposed rules require the DNR to establish a Certified Emission Reduction registry. The registry would contain information on the availability and use of Certified Emission Reduction Credits. The DNR would be required to perform periodic registry updates and prepare periodic reports on mercury registry activity.

Compliance Alternatives

The proposed rules provide flexibility to meet requirements by providing compliance alternatives. Affected stationary sources and major utilities can meet rule requirements through the following approaches:

Major utility emission reductions–

- Applying control technologies to their facilities, such as activated carbon injection, making a switch from coal to another fuel.
- Obtaining Certified Emission Reduction Credits to achieve up to 50 percent of the required reduction.

Ceilings on sources emitting more than 10 pounds of mercury annually–

- Maintain current system to keep mercury emissions below established ceiling
- If established ceiling is exceeded, obtain Certified Emission Reduction Credits to make up the difference.

Growth and offsets for new sources that emit more than 10 pounds of mercury annually–

- Seek further reductions from sources they own by applying control technology.
- Obtain Certified Emission Reduction Credits to balance out new source's emissions.

Evaluation

The DNR must report to the Natural Resources Board every 18 months to examine the feasibility of achieving reductions as well as studying rule implementation issues. Reports will include:

- Evaluation of reduction requirements taking into consideration electric reliability, scientific and technology developments, multi-pollutant reduction approaches and federal regulatory activity
- Assessment of the impact of emissions trades on local water quality (i.e. hot spots from trading)
- Review of long term mercury storage and disposal practices
- Recommendation on the feasibility of achieving the 10-year and 15-year mercury reduction requirements
- Recommendations for corrective actions and rule revisions based on evaluation report findings

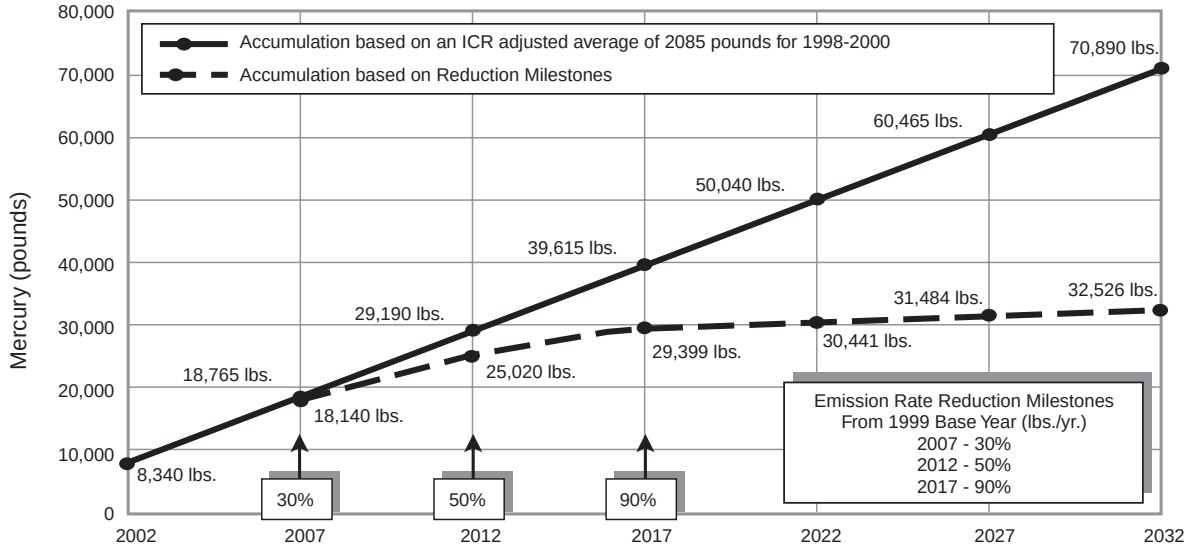
Alternatives

Alternatives to the basic provisions of the proposed rule were developed in response to concern expressed by stakeholders about the timing and level of mercury reductions, emission offset requirements for new sources and the content and schedule of periodic rule evaluations.

Suggested alternatives are as follows:

Concern	Alternatives
Amount and Schedule of Mercury Reduction	1) By 2006 – 10% reduction, 2010 – 90% reduction. • Require 90% reduction by 2008 with trading. • Reduction requirement applies to all utilities and government owned boilers emitting more than 10 pounds of mercury per year. • Include a provision for the virtual elimination of mercury 20 years after promulgation. 2) By 2007 – 10% reduction, 2012 – 40% reduction 3) Multi-pollutant reduction program alternative – mercury included in proposal. Would require commitment to provide environmental benefits beyond existing laws and rules. Program would require schedule and would be subject to public hearing. 4) Voluntary Program
Emission Offset Requirements	1) Offsets 1.5:1.0 – Require mercury emission reduction equal to 150% of the annual mercury emission increase from any new source or modification of an existing source. Applies to all new or modified sources that emit 10 pounds of mercury or more annually. 2) Latest Available Control Technology – Instead of emission offsets, establish a mercury control technology requirement for new sources and modifications of existing sources with substantial mercury emissions.
Evaluation Reports	(No alternate proposals submitted)

Projected Mercury Accummulation in the Environment from Major Electric Utility Plants Located In Wisconsin



Note: Loading to the environment set to zero at beginning of 1999. Source: WDNR Bureau of Air Management

Public Involvement Process

The DNR is gathering input on the proposed mercury rule from public hearings and from a Citizen's Advisory Committee and a Technical Advisory Group the department is appointing. The Technical Advisory Group will provide a technical and scientific analysis of the draft rule to the Citizen Advisory Committee. The Citizen Advisory Committee will review this analysis along with public comments on the draft rule the DNR receives from the public hearing process. The Citizen Advisory Committee will then provide its own comments in a report for the DNR Secretary. The DNR Secretary and staff will use all public input from the public hearings and the advisory committees to determine what revisions to the proposed rule are appropriate. The schedule for public involvement is as follows:

- **Public informational meetings 4:30 to 7:30 p.m., Sept. 5, 6, 11** - These three meetings will enable the public to ask questions and obtain more information about the proposed rule before the proposal reaches the public hearing stage later in September and October. The informational sessions will include:

  An informal open house, 4:30-5:30 p.m., so participants can talk one-on-one with DNR representatives and other participants.

  A background presentation on the rule from DNR staff, 5:30-6:00 p.m.

  A panel discussion, 6:00-6:30 p.m., so representatives from Wisconsin Utilities Association,Inc., WI Manufacturers and Commerce, and WI's Environmental Decade can share perspectives on the proposed rule.

  A question-and-answer session from 6:30-7:30 p.m. for the public.

- **Public hearings 4:30 to 7:30 p.m., Sept. 26, 27, Oct. 1, 2, 3** - Hearings provide formal opportunities for the public to submit oral testimony that will be taped and become part of the formal hearing record.

- **Formal public comment period through Oct. 15** - The DNR will accept written comments on the proposed rule through Oct. 15. Written comments are given the same weight as oral comments recorded at the public hearings.

For more information on the rule, or public involvement,
call Jon Heinrich at (608) 267-7547.
Information and **driving directions** also available at
www.dnr.state.wi.us –
under "Environmental Protection,"
select "Mercury."

GP8/01

Calendar of Public Information Meetings and Public Hearings

Public Information Meetings (4:30 p.m. - 7:30 p.m.)

September 5, 2001:
Eau Claire, Wis.
Chippewa Valley Technical College – Auditorium #M103,
620 Clairemont Avenue
(park free in student lots).

September 6, 2001:
Rhinelander, Wis.
James Williams Junior High School, 915 Acacia Lane.

September 11, 2001:
Milwaukee, Wis.
Havenwoods State Forest,
6141 N. Hopkins.

Public Hearings (4:30 p.m.)

September 26, 2001:
Eau Claire, Wis.
Chippewa Valley Technical College – Auditorium #M103,
620 Clairemont Avenue
(park free in student lots).

September 27, 2001:
Rhinelander, Wis.
James Williams Junior High School, 915 Acacia Lane.

October 1, 2001:
Milwaukee, Wis.
Havenwoods State Forest,
6141 N. Hopkins.

October 2, 2001:
Appleton, Wis.
Dar Boy Club, Mallard Room (Main Level),
N9695 CTY HWY N.

October 3, 2001:
Madison, Wis.
WDNR, GEF 2, Room 027,
101 S. Webster Street.